

SOUTHWEST FISHERIES SCIENCE CENTER
FOURTH QUARTER REPORT-FY 2003
For the Period July 1 - September 30, 2003

Submitted by: Norman Bartoo, Acting Division Director, Fisheries Resources Division

Title of accomplishment or milestone: Complete manuscript describing initial survey results and adjusted sampling plan for thresher shark sampling for thresher shark critical nursery habitat. *(Note: The start of this project has been delayed, and its scope and purpose expanded into a stock assessment improvement project. New title is: Complete report describing initial survey results for a thresher shark pre-recruit index and nursery ground study.*

Current Status: Postponed; new due Date 4th Quarter FY 2004. Field sampling to start August-September 2003.

Background information: Originally designed as a nursery ground study, this project was expanded to develop a fishery-independent index of abundance and effective population size of the commercially important common thresher shark. The work is in support of observer systems to provide measures of relative and absolute abundance for stock assessment models. Once the nursery area is defined, and a representative core area (or areas) is identified and sampled annually, the resulting neonate index of abundance should also mirror adult abundance, since stock and recruitment are tightly linked in K-selected sharks. Genetic study of neonate tissue will provide information on maternal fidelity to the region and estimating effective population size. Commercial operators are to be contracted for observed scientific sampling, to define alongshore and inshore-offshore boundaries of the nursery areas, and provide catch rate data that can be linked to the former fishery. Sampling plans and work descriptions have been prepared, and vessel and observer contracts have been awarded as of August 25, 2003. Field sampling is to be soon after, and resume again in spring 2004. Subsequent sampling will be conducted each spring-summer for three years thereafter. Last sampling year to be completed in the summer-fall of 2006, with final results and report in FY 2007-2008.

Purpose of Activity: The purpose is to define core nursery ground habitat of the common thresher shark in southern California, and to develop a relative abundance index for the West Coast population of this species, by annually sampling 0-year pups in these core nursery habitat. Genetic analyses of pup tissue will also provide an independent estimate of maternal pupping fidelity, stock containment and size (N_e).

Description of Accomplishment and Significant Results: Field work has just started; results not yet in.

Potential Significance of Accomplishment: Defining core nurseries areas will allow periodic sampling of neonates to obtain a valuable independent index of spawner adult abundance, since

stock and recruitment is so closely tied in sharks.

Problems: The start of this project was delayed because of problems in obtaining ship time, funding and staffing (e.g., a delay in NOAA Corps billet assignment; delays in allocation of funding). The project was also expanded into a stock assessment improvement study, requiring additional planning and preparation time, and contracting of charter vessels.

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